

CLAIMS

1. A magnetic encoder, which comprises a stainless steel sheet ; and an under coat adhesive containing epoxy resin and organopolysiloxane, a top coat adhesive containing phenol resin, or phenol resin and epoxy resin, and a rubber magnet as successively laid one upon another on the stainless steel sheet.

2. A magnetic encoder according to Claim 1, wherein the under coat adhesive comprises epoxy resin, organopolysiloxane as a hydrolysis condensate of organoalkoxysilane represented by the general formula $Xn-Si(OR)_{4-n}$, where X is a functional group reactive with rubber or resin, R is a lower alkyl group, and n is 1 or 2, colloidal silica, and an amide- or imide-based epoxy resin curing agent.

3. A magnetic encoder according to Claim 2, wherein the under coat adhesive composition comprises 45 to 75 wt. % of epoxy resin, 10 to 40 wt. % of hydrolysis condensate of organopolysiloxane, 3 to 10 wt. % of colloidal silica, and 0 to 5 wt. % of an amide- or imide-based epoxy resin curing agent.

4. A magnetic encoder according to Claim 2 or 3, wherein the hydrolysis condensate of organopolysiloxane is copolymerization oligomers of amino group-containing alkoxysilane and vinyl group-containing alkoxysilane.

5. A magnetic encoder according to Claim 1, wherein base polymer of the rubber magnet is NBR or ethylene-methyl acrylate copolymerization rubber.

6. A magnetic encoder according to Claim 1, for use in wheel speed sensors.